

## Quiet Heroics at the Back End: 7-Eleven Holds Its Neighborhood Edge

Sharfuddin Ahmed Khan<sup>1\*</sup> and Syed Irfan<sup>2</sup>

<sup>1</sup>Industrial Engineering and Engineering Management Department, University of Sharjah; Sharjah, UAE

<sup>2</sup>Vancouver, Canada, Ex Faculty, NED University, Karachi

\*Corresponding author: Ahmed Khan S, Industrial Engineering and Engineering Management Department, University of Sharjah; Sharjah, UAE, Tel: +971 (6) 5053965; E-mail: skhan@sharjah.ac.ae

Received date: April 29, 2016 Accepted date: May 02, 2016, Published date: May 06, 2016

Copyright: © 2016 Ahmed Khan S, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

### Abstract

Seldom, if at all, a neighborhood convenience store will conjure up images of managerial sophistication. Its typically modest offerings project across the routine and somewhat regimented purchases of ordinary consumers. They come from all ages, gender, and background — husbands and wives returning home from work; people on the move; or impetuous kids rushing in to pick up candy or a bottle of Coke. And located in either quiet or otherwise busy neighborhoods, neither their internal ambience nor outward observances suggest even a modicum of challenge that sustains the spirit of uncompromising courtesy that is churned out hour-after-hour in its Have a Nice Day cliché to its customers. Why should 7-Eleven be any different?

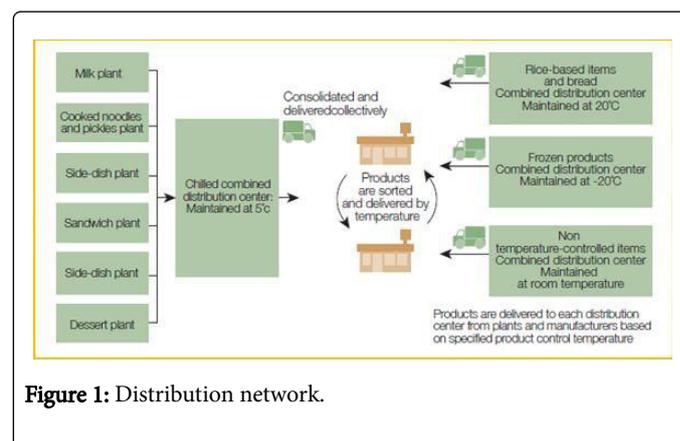
**Keywords:** Neighborhood; Consumers; Competitors

### Introduction

Indeed, it isn't. However, it takes a bit of doing to effectively and productively manage any business, least of all one that differentiates itself from competitors on the basis of service, cleanliness, quality, and assortment — all attributes of a great value-driven culture. It is not as simple as that, therefore, quipped Zafar Khan one day as a couple of triumphant customers gleefully left a 7-Eleven store after having got what they had come looking for. As the manager of that store in a quiet neighborhood of a southern British Columbia town, he understands the challenges in managing the dynamics of the value equation: to deliver the value the customer perceives in the product or service, it should cost you less than what the customer is prepared to pay for. And it seems that 7-Eleven has thrived in this fiercely competitive retail business environment where service delivery and product availability are the unquestionable imperatives. With over 27,000 stores worldwide, 7-Eleven is the largest operator, franchiser, and licensor of convenience stores in the world. And its aggressive growth strategy that emphasizes increasing same-store merchandise sales, expanding in existing markets, providing greater convenience to customers, and increasing the value of 7-Eleven licenses and expanding internationally is enough reason to likely ensure its continuing dominance in the years to come.

How does 7-Eleven organize its business operations to achieve its value targets? There may be a few ways to answer this but let us take a supply chain perspective, primarily because it affords the breadth to analyze the simultaneous flows of material and information in an integrated, well balanced manner. In a fundamental way, 7-Eleven provides a fairly large assortment of daily eatables products and consumables that are competitively priced, fresh, and available on demand all conditions that if met, will guarantee most customers' loyalties. The implications of this are obvious: keep costs to a minimum, ensure high levels of product availability, and maintain a reliable and efficient information flow upstream and downstream along the supply chain. In a more technical sense, the challenges are

inexorable: demand forecast and supply planning; intensive distribution systems; quick response to demand shifts; suppliers' relationships; and employee training. In addition, the strength of 7-Eleven's supply chain is perfectly complemented by its endless efforts to develop — innovative business processes" such as consistent production, managed distribution, sales systems, team merchandising, joint delivery, and automation of transactional processes. The idea of process management is rooted in the fundamental business principle that operating costs take care of themselves if processes are structured and hence can be managed with ease and efficiency (Figure 1).



**Figure 1:** Distribution network.

7-Eleven works with its vendors and distributors to provide daily delivery of fresh food and periodic delivery of other items to its stores to lower the cost of delivery, and to shift deliveries to off-peak hours. In particular, the supply of fresh food commands the most attention and, perhaps, some earnest innovation. "We see fresh food as a key differentiator between us and other convenience stores," notes Simon Osborn, managing director of logistics for 7-Eleven. "Anybody can sell cigarettes and beer—not everyone has the necessary infrastructure to successfully sell fresh food." Vendors include independently-owned and operated bakeries and commissaries that provide daily deliveries

of fresh foods, such as sandwiches, salads, and baked goods, to its stores. The company uses 24 combined distribution centers (CDCs) in the United States and Canada that act as hubs to service approximately 5,000 of its stores. Each center serves about 200 stores, on average. These centers typically serve stores within a 60-minute drive.

In order to keep the taste and freshness of foodstuff at the highest level, appropriate temperatures for all foodstuffs have to be maintained during delivery. This is managed through a technologically intensive system of temperature control that connects orders in transit with the plants and the CDCs. And once the fresh foodstuff gets into the stores, regular monitoring of temperature every four hours ensures that a comprehensive quality control system continues to evolve [1-3].

### 7-Eleven's Retail Information System — The Jewel in The Crown

While information technology has its presence in 7-Eleven's crucial linkages with its suppliers, its pivotal role resides in its proprietary Retail Information System — the defining feature in 7-Eleven's massive —centrally decentralized supply chain. A huge data repository, operated by EDS, provides store managers with information on what's selling, but the managers use their own on-the-spot knowledge of the neighborhood to make final ordering decisions. This approach lets 7-Eleven combine the management efficiency and purchasing clout of a national chain with the entrepreneurial feel of a mom-and-pop store. By adding local control of the ordering process, 7-Eleven takes the opposite approach to Wal-Mart Stores Inc.'s much-heralded replenishment supply-chain model, in which products are automatically reordered once stocks fall below a certain level.

However, providing this bit of mobility and the accompanying control had to be a much deliberated decision. 7-Eleven conducted tests on a dozen devices from a variety of vendors before choosing the Symbol and NEC Corporation's hardware for inventory control and purchasing. It is not surprising, therefore, that store personnel now don't run into managerial black holes. What happens during the daily stock-take when the manager finds she's running out of an item? In her hand she carries NEC's hand-held wireless PDA from where she only need enter the item and the information is fed via the shop's computer direct to a central warehouse from where supplies will be dispatched on the next delivery!

But suppose the same technology infrastructure could also give them detailed analysis of customer buying trends? It does! That transformation starts with each purchase. No sooner has a customer paid for a newspaper and coffee than the transaction is on its way to a data center in Dallas, to be stored and analyzed along with those of the 6 million other U.S. customers who visit the chain's outlets each day. Management uses this information to identify sales trends, improve product assortment, eliminate slow-moving products, analyze waste or disposal, and increase same-store sales. Insights gleaned from the data also helps 7-Eleven develop new products such as its fresh food offerings that attract new customers and increase transaction size. Last, but not the least, because retail sales are weather-dependent, the system provides store managers with updated weather forecasts. No doubt, the bulk of 7-Eleven's IT staff is devoted to "higher-end analytics and physical and logical data modeling," their objective being to ensure that everything they do finds a receptive audience among its 6 million daily customers.

### Developing the Strategic Context and Putting it in Place

Despite the cutting-edge that its information system confers upon it, 7-Eleven sees itself as a retailer and not a technology company. This makes immense sense — investments in IT need to be seen in a business perspective. 7-Eleven stores are not all alike. What their customers want depends a great deal on the neighborhood and the region of the country. Without specific knowledge, 7-Eleven was unable to determine which items were selling well or, more importantly, what items were most profitable. This made a difference to the company's bottoming because of missed sales opportunities, lower profits, and excess store inventory including the perishable write-offs. Profit margins are very thin in the retail convenience store business so even a marginal increase in sales volume can spell the difference between success and failure.

How can one analyze a business and identify its strategic advantages? And how do information systems contribute to strategic advantages? One answer to that question is Michael Porter's competitive forces model. According to Porter there are four generic strategies to inhibit competition, each of which often is enabled by using information technology and systems: low-cost leadership, product differentiation, focus on market niche, and strengthening customer and supplier intimacy. And while it may seem somewhat incidental, the fact is that 7-Eleven has managed to leverage its IT system perfectly to put in place all these strategies in varying measures (Figure 2).

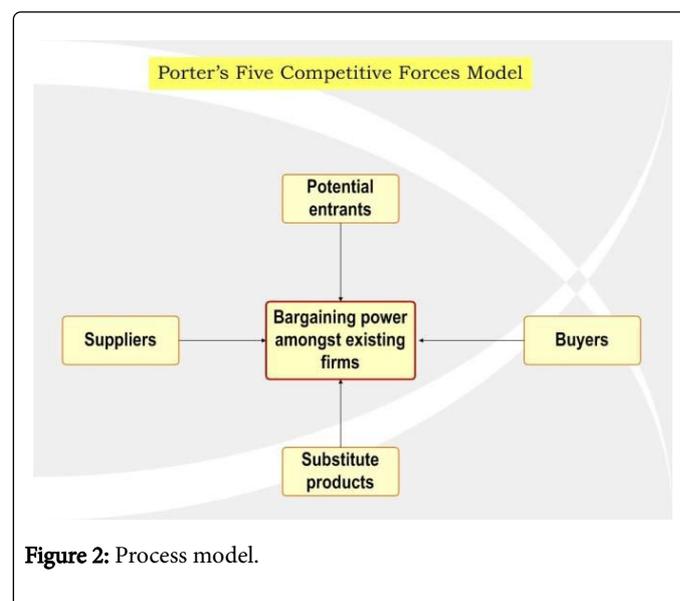


Figure 2: Process model.

However, the Porter's model stops short of prescribing a methodology to follow for achieving competitive advantage. The supply chain model complements the process – it identifies specific, critical-leverage points where a firm can use information technology most effectively to enhance its competitive position. Indeed, 7-Eleven derives its real strength through its logistics operations, i.e., by exploiting the supply chain paradigm. The retail convenience business is characterized by an enormous customer base – a fact that has allowed 7-Eleven to adopt a market dominance strategy. While competitors also abound, the company has managed to achieve the economies of scale concept and in tandem with its aggressive logistics strategy has been able to achieve demonstrated success. 7-Eleven's cost

competitiveness and high product availability are unarguably the direct outcomes of its supply chain strategy (Figure 3).

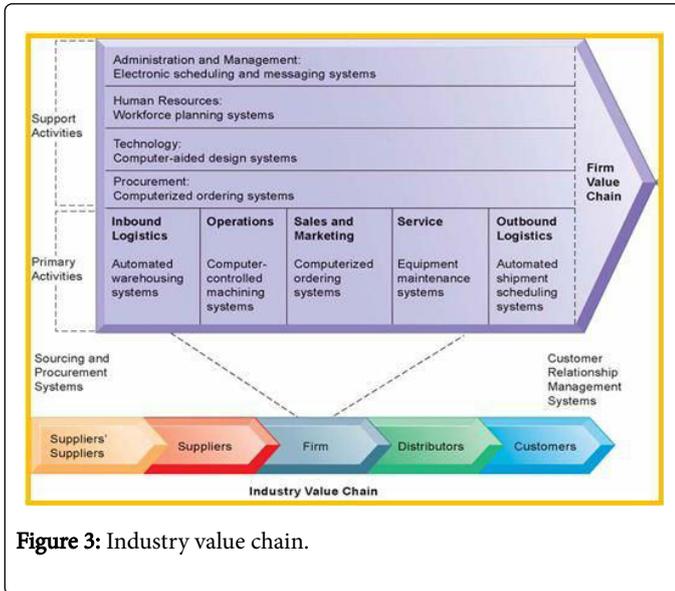


Figure 3: Industry value chain.

The combined distribution centers, CDCs, which consolidate orders from multiple suppliers or daily or periodically phased distribution to individual stores, offer a number of advantages:

- More frequent deliveries of time-sensitive products and improved in-stock levels,
- Off-peak, consolidated deliveries that allows to focus on operations and reduce congestion,
- Access to products that traditionally have not been available to individual stores,
- Shortened delivery distance and time and reduction in the number of delivery vans.

Aggregation of end demand is the triggering factor in this largely virtuous cycle. It offsets the cumulative 'effect of uncertainty in demand at individual locations and promotes the concept of cross-docking or trans-shipment in the form of the CDCs. Since stores are densely located near each CDC, 7-Eleven can gain the economy of scales for outbound transportation too. However, the large number of stores implies small order sizes and varied demand across SKUs. This is effectively managed with the joint-order replenishment policy that offsets the increased handling costs by combining SKUs in a single order. The joint order policy also allows for frequent deliveries to stores thus resulting in high fill rates and fresh supply of products.

The concept of aggregation extends beyond the distribution cycle into the production cycle as well. 7-Eleven has its production of fresh food converged into a few facilities — this has a number of advantages as well: less uncertain demand; better capacity utilization; consistent quality; reduced inbound transportation costs; and frequent deliveries.

In the world of business, complacency may be an entirely misplaced human trait. What may have taken years of unremitting excellence to establish a brand, worthy of being championed, envied and emulated, could easily be consigned to history through casual nonchalance to the customer's voice or the competitor's roving eye. While managerial sophistication need not always reflect in outward observances it surely needs to be assimilated into the professional conduct of anybody aspiring to delivering value in the fast-paced, challenging world of retailing. 7-Eleven should know!

## References

1. Steven M (2004) The 24-Hour supply chain. *Information week*.
2. Hamblen M (2005) 7-Eleven rolls out rugged handhelds from symbol. *Computer world*.
3. Laudon KC, Laudon JP (2012) *Management Information Systems. Managing the Digital Firm* (12edn) Pearson Education, Inc, London.